

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of :  
Sumio IJIMA et al. : **Mail Stop: PCT**  
Serial No. NEW : Attorney Docket No. 2004-1553A  
Filed September 29, 2004 :

METHOD FOR PRODUCING SINGLE-  
WALLED CARBON NANOTUBES  
[Corresponding to PCT/JP03/03884  
Filed March 27, 2003]

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to the provisions of 37 CFR 1.56, 1.97 and 1.98, Applicants request consideration of the references listed on attached form PTO-1449 and any additional information identified below in paragraph 3. A legible copy of each reference listed on the Form PTO-1449 is enclosed, except a copy is not provided for:

- ☐ each U.S. Patent and U.S. Patent application publication (*for U.S. National applications filed after June 30, 2003 and International applications that have entered U.S. National Stage after June 30, 2003*),
- ☒ each reference previously cited in the international application PCT/JP03/03884; and/or
- ☐ each reference previously cited in prior parent application Serial No. \_\_\_\_\_

1a. ☒ This Information Disclosure Statement is submitted:

within three months of the filing date (or of entry into the National Stage) of the above-entitled application, or

before the mailing of a first Office Action on the merits or the mailing of a first Office Action after the filing of an RCE,

**and thus no certification and/or fee is required.**

1b. ☐ This Information Disclosure Statement is submitted

after the events of above paragraph 1a and prior to the mailing date of a final Office Action or a Notice of Allowance or an action which otherwise closes prosecution in the application, and thus:

(1) ☐ the certification of paragraph 2 below is provided, **or**

(2) ☐ the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.

1c. ☐ This Information Disclosure Statement is submitted:

after the mailing date of a final Office Action or Notice of Allowance or action which otherwise closes prosecution in the application, and prior to payment of the issue fee, and thus:

**the certification of paragraph 2 below is provided, and**

**the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.**


2. It is hereby certified

- a. ☐ that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Statement, or
- b. ☐ that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in §1.56(c) more than three months prior to the filing of the Statement.

3. ☐ Consideration of the following list of additional information (including any copending or abandoned U.S. application, prior uses and/or sales, etc.) is requested.
4. For each non-English language reference listed on the attached form PTO-1449, reference is made to:
- a. ☐ a full or partial English language translation submitted herewith,
  - b. ☐ a foreign patent office search report (in the English language) submitted herewith,
  - c. ☐ the concise explanation contained in the specification of the present application at page,
  - d. ☐ the concise explanation set forth in the attached English language abstract,
  - e. ☐ the concise explanation set forth below or on a separate sheet attached to the reference:
5. ☒ A foreign patent office (International) search report (Attachment F) citing one or more of the references is enclosed.

Respectfully submitted,

Sumio IJIMA et al.

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FORM PTO 1449 (modified)

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)  
(Use several sheets if necessary)

Date Submitted to PTO: September 29, 2004

ATTY DOCKET NO.  
2004-1553ADT000000 PCT/PTO 29 SEP 2004  
SERIAL NO. NEW 10/509575APPLICANT  
Sumio IJIMA et al.FILING DATE  
September 29, 2004

GROUP

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA						
	AB						
	AC						

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	AD						
	AE						

## OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

	AF	Ming Su et al., "Lattice-Oriented Growth of Single-Walled Carbon Nanotubes," J. Phys. Chem. B., Vol. 104, No. 28, pp. 6505 to 6508, (July 2000).
	AG	Yihong Wu et al., "Carbon Nanowalls Grown by Microwave Plasma Enhanced Chemical Vapor Deposition," Adv. Mater., Vol. 14, No. 1, pp. 64-67, table 1, last line, (January 2002).
	AH	L. Rotkina et al., "The Oriented Growth of Carbon Nanotubes on Si(100)," AIP Conference Proceedings, Vol. 591, pp. 247-250, (2001).
	AI	Jing Kong et al., "Synthesis of Individual Single-Walled Carbon Nanotubes on Patterned Silicon Wafers," Nature, Vol. 395, pp 878-881, (1998).
	AJ	Li Ping et al., "Atomic Force Microscopy of Carbon Nanotubes and Nanoparticules," Mater. Res. Soc. Symp. Proc., Vol. 359, pp. 87-91, (1995).
	AK	Z.P. Huang et al., "Growth of Highly Oriented Carbon Nanotubes by Plasma-Enhanced Hot Filament Chemical Vapor Deposition," Applied Physics Letters, Vol. 73, No. 26, pp 3845-3847, (1998).
	AL	H. Hongo et al. "Chemical Vapor Deposition of Single-Wall Carbon Nanotubes on Iron-Film-Coated Sapphire Substrates," Chem. Phys. Letters, Vol. 361, No. 3/4, pp. 349-354 (June 2002).

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include cop. this form with next communication to applicant.